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Citations

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Alcohol & Injuries

In Georgia almost 5 million drivers have been involved in motor vehicle crashes since 1996 and 12,606 people lost their lives in those crashes. On average 1,621 drivers were involved in motor vehicle crashes each day from 1996 to 2003 – 68 drivers every hour.

- ◆ We cannot place definitive blame to any one driver from the crash data. We can only use the contributing factors noted by the officer at the crash scene to determine the error in judgement or high-risk behavior was noted in the crash. From that frequency we can make only certain limited assumptions.
- ◆ Crashes are the result of a combination of factors. Consider the driver late for a meeting driving too fast on a two-lane narrow winding road that he does not know well in a bad mood with a bad attitude on tires that are starting to bald and it starts to rain. And he crashes. All we have is what is on the crash form and that will certainly be missing vital information. The driver's mood or attitude will most certainly not be recorded. In fact speeding may never be recorded on the crash report if there is no physical evidence such as skid marks.
- ◆ Cultures are not set in stone - they change, they decline and they grow. Legislation, engineering, law enforcement and we as individuals can do much to create the restraints necessary to change Georgia roadways from a culture of danger, speed and injury to safe places.

According to anthropologist Marc Auge highways are non-places. Non-places are areas and places that have no cultural restraints. They belong to everyone of all cultures and that is why there must be laws that govern behavior and a 'license' is needed to drive on them. Classifying highways as non-places explains why drivers often behave in an automobile in a way that they would never behave in other places. From tailgating to littering to cutting off other drivers they feel no cultural restraint and it is only the threat of the law or imminent injury that keeps them in line.

Since law enforcement cannot be everywhere and people rarely feel the very real imminent danger that exists on the roads perhaps Alexander Solzhenitsyn was correct "The salvation of mankind lies only in making everything the concern of all." Drive as though your mom were in the car with you or in the car behind you.

Drivers in Crashes

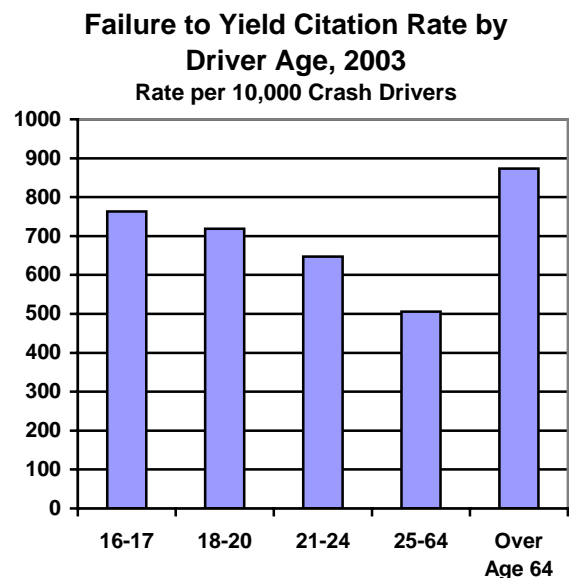
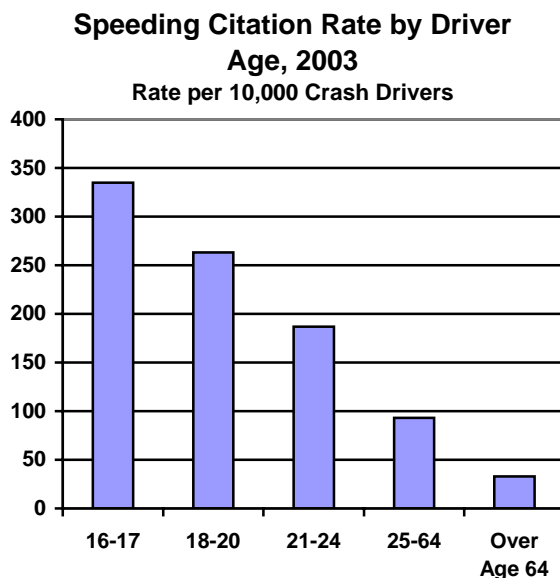
	1996	1997	1998	1999*	2000	2001	2002	2003	1996-2003
Crash Drivers	565,421	572,952	584,093	573,550	585,916	603,217	621,439	626,906	4,733,494
Injury Drivers	170,342	168,274	166,533	154,950	161,218	166,050	166,504	167,151	1,321,022
Fatal Drivers	2,228	2,261	2,258	2,145	2,244	2,438	2,260	2,377	18,211
Data excludes bicyclists and pedestrians									

*Not all paper crash report documents could be recovered for 1999 so these figures are assumed to be lower than the actual count.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Drivers age 18 received the highest number of citations for a single age group. 9,944 traffic citations were written to 18-year-old drivers in crashes in 2003. They also had the highest overall crash rate and the highest fatal crash rate in 2003.

- ◆ A total of 236,240 traffic citations were issued in the 331,612 motor vehicle crashes in 2003.
- ◆ The highest number of traffic citations was written for following too closely. The second greatest number of tickets was for failure to yield. 75,460 citations were written for following too closely and 34,307 for failure to yield.
- ◆ Calculating a rate per 10,000 crash drivers for each type of traffic citation gives us an idea of the risk or frequency for certain drivers. For example, the speeding citation rate per 10,000 crash drivers is 335.3 for crash drivers ages 16-17 compared with 92.5 for drivers ages 25-64. Unsafe or illegal speed is one of the top three contributing factors in fatal crashes involving drivers ages 16-17.
- ◆ The highest rate for driving under the influence of alcohol or drugs was for drivers ages 21-24 a rate of 206.2 per 10,000 crash drivers compared with 55.5 for drivers ages 16-17 and 155.2 for drivers ages 25-64.
- ◆ The citation rate per 10,000 crash drivers over age 64 for failure to yield was 872.8 compared with a rate of 505.6 for drivers ages 25-64. In 2003, the top contributing factor for drivers over age 64 in fatal crashes was failure to yield. Younger drivers also had a higher rate when compared to drivers ages 25-64. For drivers ages 16-17 the failure to yield rate was 762.6 and for drivers 18-20 the rate was 718.6.



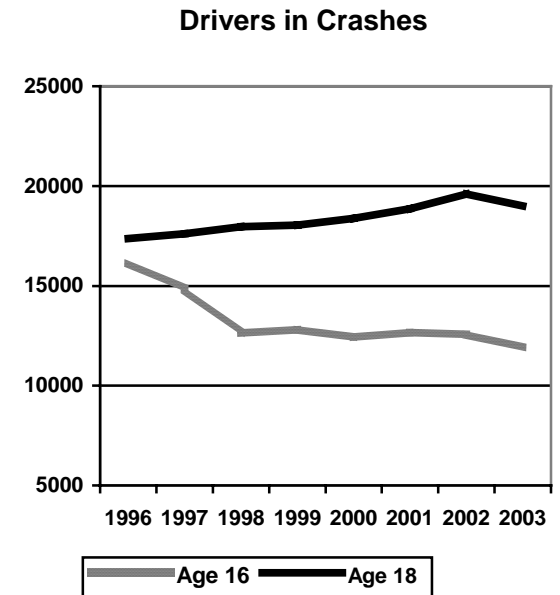
*Traffic citations were grouped by type of driver violation.

Data excludes bicyclists and pedestrians

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

The inexperience and immaturity of younger drivers are thought to be major contributing factors in their higher fatality rate. Recent neurological research indicates that the decision making part of the brain, the frontal lobe, is not fully developed until age 23. That may be reflected in the crash data below.

- ◆ Almost one out of five drivers age 18 was in a crash in 2003 compared with one out of 13 for drivers over age 24. In 2003, 19,009 drivers age 18 were involved in crashes compared with 11,906 drivers age 16.
- ◆ In spite of the higher fatal crash rate for younger drivers, drivers over the age of 24 accounted for three out of four drivers in fatal crashes.



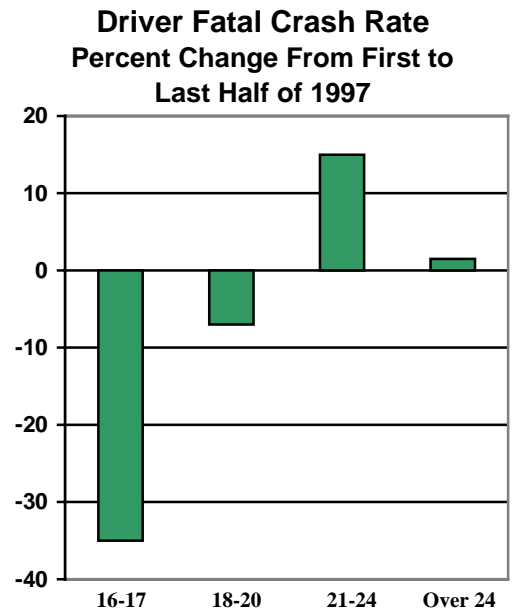
Young Drivers in Crashes									
Crash Drivers									
Age	1996	1997	1998	1999*	2000	2001	2002	2003	1996-2003
16	16,143	14,843	12,628	12,803	12,418	12,670	12,578	11,906	105,989
17	16,825	17,253	16,219	15,424	15,475	15,464	16,516	16,012	129,188
18	17,366	17,613	17,964	18,045	18,376	18,853	19,589	19,009	146,815
19	16,453	16,401	16,764	17,158	17,807	18,264	18,658	18,404	139,909
20	15,413	15,845	15,933	15,987	17,038	17,245	17,862	17,849	133,172
21-24	62,024	60,373	60,430	59,190	62,245	64,577	67,375	68,150	504,364
Over 24	388,466	397,202	410,561	402,664	409,909	421,933	433,224	439,399	3,303,358
Injury Crash Drivers									
16	5,386	4,797	3,903	3,727	3,783	3,849	3,807	3,526	32,778
17	5,462	5,557	4,991	4,498	4,748	4,560	4,724	4,510	39,050
18	5,634	5,597	5,554	5,243	5,430	5,616	5,653	5,452	44,179
19	5,327	5,145	5,124	5,110	5,125	5,404	5,281	5,311	41,827
20	4,995	5,089	4,823	4,610	4,962	4,943	5,093	4,981	39,496
21-24	19,483	18,430	17,865	16,441	17,584	18,162	18,632	18,795	145,392
Over 24	117,769	117,199	118,152	109,892	114,110	117,703	117,463	118,769	931,057
Fatal Crash Drivers									
16	65	45	41	43	40	50	44	44	372
17	63	59	52	53	46	57	49	68	447
18	77	65	68	75	76	74	70	70	575
19	73	64	51	61	62	79	60	51	501
20	60	52	68	67	56	64	48	65	480
21-24	247	252	224	188	219	276	219	239	1,864
Over 24	1,583	1,631	1,696	1,597	1,686	1,776	1,682	1,769	13,420

*Not all paper crash report documents could be recovered for 1999 so these figures are assumed to be lower than the actual count.
Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Young Drivers and the Teenage and Adult Driver Responsibility Act *1996-2003 CASI Report*

The Teenage and Adult Driver Responsibility Act went into effect on July 1, 1997 to reduce the number of lives lost in crashes involving young drivers.

- ◆ From the first half of 1997 before the law was passed to the last half of 1997 when the law went into effect, the number of drivers ages 16-17 in fatal crashes declined significantly.
- ◆ The fatal crash rate per 10,000 licensed drivers ages 16-17 declined 35.1 percent from the first to the last half of 1997.
- ◆ When comparing 1996 with 2003, the number of drivers ages 16-17 in fatal crashes declined 12.5 percent. When adjusted for the increase in licensed drivers the driver fatal crash rate declined 23.3 percent.



- ◆ From 1996 to 2003, the number of drivers in crashes increased for all age groups except for drivers ages 16-17 although the crash rate per 10,000 licensed drivers declined for all types of crashes.
- ◆ A declining rate simply indicates the *relative* risk has declined it does not mean that all safety issues have been effectively addressed and the crash risk or risk of injury is still not significant.

Young Drivers in Crashes Number and Rate per 10,000 Licensed Drivers						
Driver Age	1996 Number	1996 Rate	2003 Number	2003 Rate	Percent Change in Number	Percent Change in Rate
All Crashes						
16-17	32968	2,186.3	27918	1,622.1	-15.32	-25.81
18-20	49232	1,882.9	55262	1,682.7	12.25	-10.63
21-24	62024	1,553.3	68150	1,304.2	9.88	-16.04
>24	388466	873.3	439399	750.4	13.11	-14.08
Injury Crashes						
16-17	10848	719.4	8036	466.9	-25.92	-35.10
18-20	15956	610.2	15744	479.4	-1.33	-21.44
21-24	19483	487.9	18795	359.7	-3.53	-26.28
>24	117769	264.8	118769	202.8	0.85	-23.39
Fatal Crashes						
16-17	128	8.49	112	6.51	-12.50	-23.34
18-20	210	8.03	186	5.66	-11.43	-29.48
21-24	247	6.19	239	4.57	-3.24	-26.06
>24	1583	3.56	1769	3.02	11.75	-15.11
Licensed Drivers						
16-17	150792		172108		14.14	
18-20	261471		328418		25.60	
21-24	399293		522529		30.86	
>24	4448000		5855488		31.64	

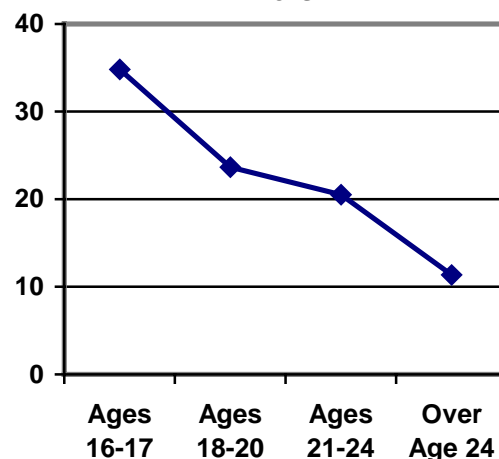
Data excludes bicyclists and pedestrians. The number of licensed drivers is used as a proxy measurement of risk exposure. We do not have a measure of actual miles driven by driver age or gender.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

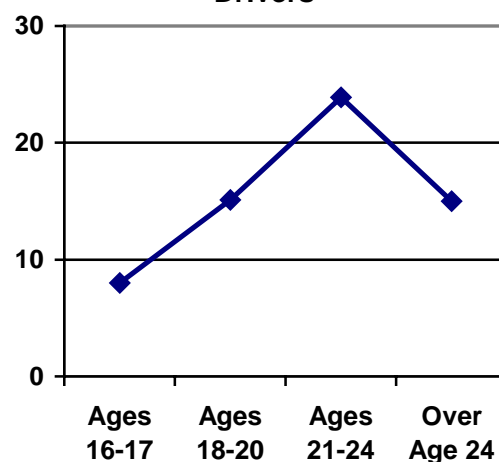
Lost Control of Vehicle is often associated with unsafe speed as is Followed Too Closely and Failure to Yield. It is the number one contributing factor in fatal crashes, at low speeds it results in a damaged vehicle at high speeds the result is fatal.

- ◆ The three top contributing factors to fatal crashes involving drivers ages 16-17 were Lost Control of Vehicle, Unsafe or Illegal Speed, and Failure to Yield. For drivers over age 24, the top three contributing factors to fatal crashes were Lost Control of Vehicle, Driving Under the Influence of Alcohol or Drugs, and Failure to Yield.
- ◆ Lost Control of Vehicle was noted for 49.1 percent of the drivers ages 16-17 in fatal crashes, compared with 24.1 percent of drivers over age 24 in fatal crashes. The contributing factor of Unsafe or Illegal Speed was noted for 34.8 percent of the drivers ages 16-17 in fatal crashes, compared with 11.4 percent of drivers over age 24 in fatal crashes.
- ◆ The three top contributing factors to fatal crashes involving drivers ages 18-20 were Lost Control of Vehicle, Unsafe or Illegal Speed, and Driving Under the Influence of Alcohol or Drugs. For drivers ages 21-24 the top three contributing factors to fatal crashes were Lost Control of Vehicle, Driving Under the Influence of Alcohol or Drugs, and Unsafe or Illegal Speed.
- ◆ Driving Under the Influence of Alcohol or Drugs was noted for 8.0 percent of the drivers ages 16-17 in fatal crashes, compared with 23.9 percent of drivers ages 21-24 in fatal crashes.

**Unsafe or Illegal Speed, 2003
Percent of Fatal Crash Drivers**



**Alcohol or Drug Related, 2003
Percent of Fatal Crash Drivers**



As in 1996, the most dangerous time of day for drivers age 16 is not late at night or in the early morning hours but after school in the afternoon rush hour. In 2003, over one third of all fatalities in crashes involving at least one driver age 16 occurred from 3-6 PM. The second most dangerous time was in the early evening hours from 6-9 PM. The fewest fatalities occurred from 3 to 6 AM with 1 fatality. The second least dangerous time was from 12 midnight to 3 AM with 2 fatalities.

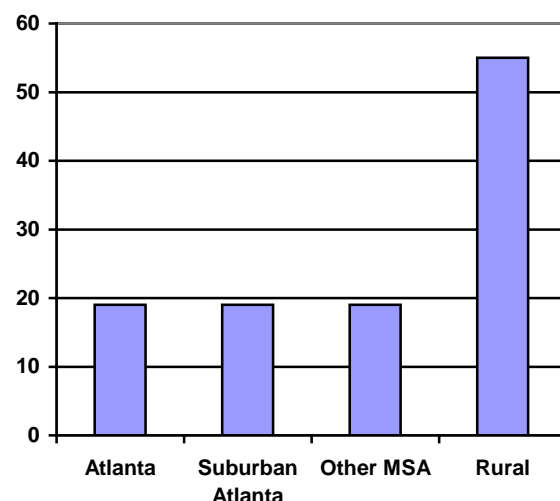
Data excludes bicyclists and pedestrians

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Rural roads have a higher fatal crash rate for all drivers and young drivers are no exception. Rural roads are dangerous because they are often narrow, two-lane roads with no physical barrier or division separating oncoming traffic, close utility poles, and have frequent entering and exiting traffic. This greatly increases the risk of a fatal crash and given the propensity of teen drivers for unsafe or illegal speed the result is often fatal.

- ◆ The fatal crash rate for drivers ages 16-17 in rural counties is almost three times the fatal crash rate for drivers ages 16-17 in the five Atlanta metropolitan counties
- ◆ In 2003, 19 drivers ages 16-17 were involved in fatal crashes in Clayton, Cobb, DeKalb, Fulton and Gwinnett counties, compared with 55 drivers ages 16-17 involved in fatal crashes in rural counties.
- ◆ For drivers ages 18-20 the number of drivers in fatal crashes in rural counties was almost double the number in the five Atlanta metropolitan counties. In rural counties 82 drivers ages 18-20 were involved in fatal crashes compared with 44 in the five Atlanta counties.
- ◆ In the 15 suburban Atlanta counties and in the other MSA counties the driver fatal crash rates were higher than the five Atlanta counties for all age groups.
- ◆ For all age groups rural counties have the highest number of drivers in fatal crashes and the highest driver fatal crash rate.

Number of Drivers Ages 16-17 in Fatal Crashes by Region, 2003



**Drivers in Fatal Crashes by Driver Age and Region, 2003
Number and Rate per 10,000 Licensed drivers**

	Ages 16-17		Ages 18-20		Ages 21-24		Over Age 24	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Atlanta	19	3.64	44	4.17	69	3.84	412	1.90
Atlanta Suburban	19	5.77	30	5.36	37	4.56	297	3.06
Other MSA	19	6.14	30	4.84	46	4.53	286	2.79
Rural Counties	55	9.82	82	7.81	87	5.43	774	4.59

*Pre-2003 census definition was used. Five Atlanta Metropolitan Counties: Clayton, Cobb, DeKalb, Fulton, Gwinnett; Atlanta Suburban Counties: Barrow, Bartow, Carroll, Cherokee, Coweta, Douglas, Fayette, Forsyth, Henry, Newton, Paulding, Pickens, Rockdale, Spalding, Walton; Other Metropolitan Statistical Area (MSA) Counties: Bibb, Bryan, Catoosa, Chatham, Chattahoochee, Clarke, Columbia, Dade, Dougherty, Effingham, Harris, Houston, Jones, Lee, Madison, McDuffie, Muscogee, Oconee, Peach, Richmond, Twiggs, Walker; Rural Counties: All other counties

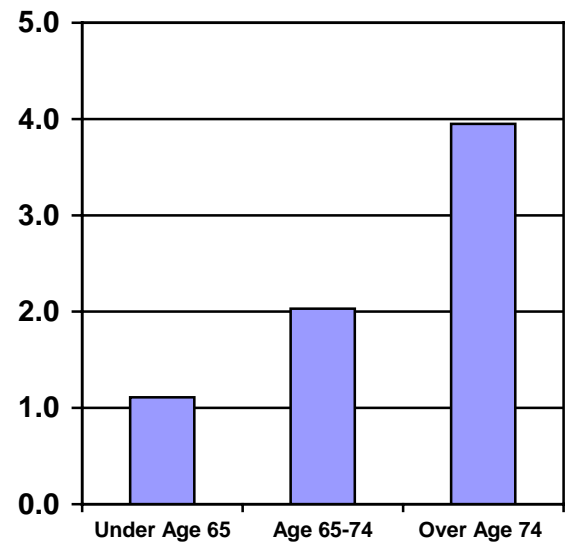
Data excludes bicyclists and pedestrians. The number of licensed drivers is used as a proxy measurement of risk exposure. We do not have a measure of actual miles driven by driver age or gender.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Older persons face a greater risk of injury or death in motor vehicle crashes than younger persons due to a greater susceptibility to physical injury that is often complicated by previous existing medical conditions.

- ◆ Persons over age 64 were more often seriously injured or killed in crashes than younger persons. Twice as many injured persons ages 65-74 were killed compared with persons under age 65. In 2003, 2.0 percent of the injured persons ages 65-74 were killed.
- ◆ In 2003, persons over age 74 were almost four times more likely to be killed than younger persons under age 65. Of the persons over age 74 injured, 4.0 percent were killed compared with 1.11 percent for persons under age 65.

Severity of Injury by Age, 2003
Percent Killed of Injured Persons



Older Drivers in Crashes
Number and Rate per 10,000 Licensed Drivers

Driver Age	1996		2003		Percent	Percent
	Number	Rate	Number	Rate	Change in Number	Change in Rate
All Crashes						
16-24	144,224	1,777.1	151,330	1,479.2	4.93	-16.76
25-64	356,108	917.2	403,755	787.1	13.38	-14.18
65-74	21,024	582.1	22,542	507.7	7.22	-12.79
Over 74	11,334	554.4	13,102	464.7	15.60	-16.19
Injury Crashes						
16-24	46,287	570.3	42,575	416.2	-8.02	-27.03
25-64	107,588	277.1	108,574	211.7	0.92	-23.62
65-74	6,553	181.4	6,278	141.4	-4.20	-22.08
Over 74	3,628	177.5	3,917	138.9	7.97	-21.73
Fatal Crashes						
16-24	585	7.21	537	5.25	-8.21	-27.18
25-64	1,379	3.55	1,538	3.00	11.53	-15.59
65-74	103	2.85	133	3.00	29.13	5.03
Over 74	101	4.94	98	3.48	-2.97	-29.65

◆ From 1996 to 2003 the number of drivers over age 74 in crashes increased 15.6 percent although the rate declined 16.2 percent.

◆ The number of drivers ages 65-74 in fatal crashes increased 29.1 percent and the rate increased 5.0 percent.

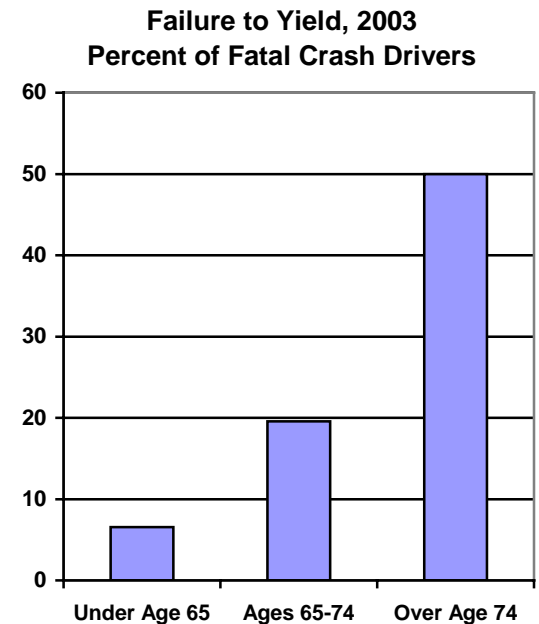
◆ For drivers over age 74 the number of drivers in fatal crashes declined 3.0 percent.

Data excludes bicyclists and pedestrians. The number of licensed drivers is used as a proxy measurement of risk exposure. We do not have a measure of actual miles driven by driver age or gender.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

The three top contributing factors to fatal crashes for drivers over age 74 were Failure to Yield, Lost Control of Vehicle, and Disregarded Stop/Signal.

- ◆ In comparison, the top three contributing factors to fatal crashes for drivers under age 65 were Lost Control of Vehicle, Driving Under the Influence of Alcohol or Drugs and Unsafe or Illegal Speed.
- ◆ In fatal crashes in 2003, Failure to Yield was reported for 50.0 percent of the drivers over age 74 compared with 6.6 percent of the drivers under age 65.
- ◆ Lost Control of Vehicle was noted for 16.3 percent of the drivers over age 74 in fatal crashes. In comparison, it was noted for 28.6 percent of drivers under age 65 in fatal crashes who also have a higher reported incidence of Unsafe or Illegal Speed and Driving Under the Influence of Alcohol or Drugs.



A multitude of factors is associated with the higher fatal crash risk of older drivers. Although these factors also contribute to fatal crashes for younger drivers they are especially important when the older driver is involved.

- ◆ Older drivers often have physical challenges due to poor physical mobility such as difficulty turning the head sufficiently to observe traffic on the side or coming from the rear. This may be reflected in the high incidence of Failure to Yield in crashes involving older drivers.
- ◆ Declining vision, hearing and reflexes contribute to the potential of a crash although older drivers compensate to some extent for these physical limitations and often self limit their driving. Roadway striping that is faded or worn out and poor signing may pose special difficulties to the older driver, especially at night.
- ◆ The lack of adequate funding for EMS and emergency rooms is a special problem in rural areas. This deficiency complicates the outcome for older persons who are more susceptible to injury and may have previous existing medical conditions.
- ◆ Older persons often travel with older drivers. The older person's greater susceptibility to physical injury greatly increases the chance that someone in an older driver's vehicle will be seriously injured or killed in a crash.

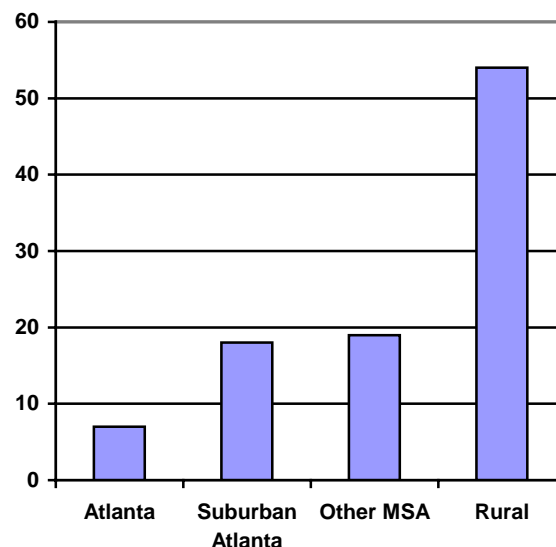
Data excludes bicyclists and pedestrians.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Roads in rural counties are dangerous for all drivers and especially for the older driver. They have more fatal crashes and higher fatal crash rates for drivers of all ages. In rural areas the lack of accessible public transportation and the distance to needed facilities in many cases necessitates driving on high-risk rural roads.

- ◆ The number of older drivers in fatal crashes in rural counties is more than double the number of drivers in fatal crashes in the other three regions.
- ◆ Even when adjusted for the number of licensed drivers rural roads are more fatal for older drivers.
- ◆ The fatal crash rate for drivers ages 65-74 in rural counties is almost double the fatal crash rate for drivers ages 65-74 in the five Atlanta metropolitan counties.
- ◆ In the 15 suburban Atlanta counties and in the other MSA counties the driver fatal crash rates were higher than the five Atlanta counties for all age groups – much higher for drivers over age 74.
- ◆ For drivers over age 74 the fatal crash rate in rural counties and in the 15 Atlanta suburban counties is five times the fatal crash rate for drivers over age 74 in the five Atlanta counties.

Number of Drivers Over Age 74 in Fatal Crashes by Region, 2003



Drivers in Fatal Crashes by Driver Age and Region, 2003
Number and Rate per 10,000 Licensed Drivers

	Ages 16-24		Ages 25-64		Ages 65-74		Over 74	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Atlanta	132	3.91	380	1.92	25	2.10	7	0.94
Atlanta Suburban	86	5.06	261	3.02	18	2.63	18	4.74
Other MSA	95	4.89	243	2.78	24	2.66	19	3.11
Rural Counties	224	6.98	654	4.63	66	3.96	54	4.97

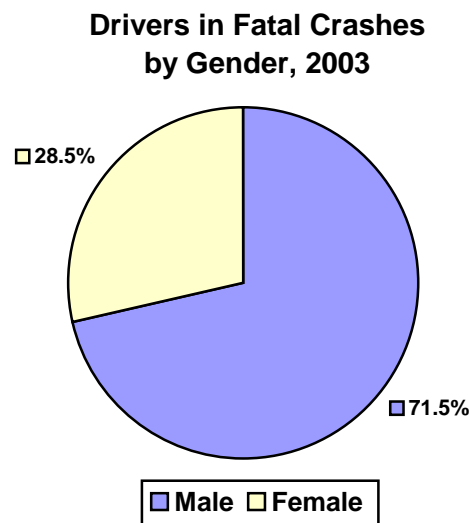
*Pre-2003 census definition was used. Five Atlanta Metropolitan Counties: Clayton, Cobb, DeKalb, Fulton, Gwinnett; Atlanta Suburban Counties: Barrow, Bartow, Carroll, Cherokee, Coweta, Douglas, Fayette, Forsyth, Henry, Newton, Paulding, Pickens, Rockdale, Spalding, Walton; Other Metropolitan Statistical Area (MSA) Counties: Bibb, Bryan, Catoosa, Chatham, Chattahoochee, Clarke, Columbia, Dade, Dougherty, Effingham, Harris, Houston, Jones, Lee, Madison, McDuffie, Muscogee, Oconee, Peach, Richmond, Twiggs, Walker; Rural Counties: All other counties

Data excludes bicyclists and pedestrians. The number of licensed drivers is used as a proxy measurement of risk exposure. We do not have a measure of actual miles driven by driver age or gender.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

In 2003, male drivers were involved in 71.5 percent of the fatal crashes, although they accounted for only 49.1 percent of licensed drivers in Georgia.

- ◆ Although the number of female drivers in crashes increased by 15.3 percent from 1996 to 2003 when adjusted for the increase in female drivers the crash rate for female drivers declined 13.0 percent.
- ◆ In 2003, the fatal crash rate per 10,000 licensed drivers for male drivers was more than double that of female drivers. Male drivers accounted for 76.8 percent of the drivers in deadly single vehicle crashes such as overturned or fixed object.
- ◆ Male drivers were over-represented in fatal crashes overall. In 2003 male drivers accounted for 81.1 percent of the drivers in fatal crashes involving illegal or unsafe speed and 82.3 percent of the alcohol or drug involved drivers in fatal crashes.
- ◆ In fatal crashes 66 percent of female drivers involved were using safety restraints, compared with 49 percent of the male drivers.



Drivers in Crashes by Gender Number and Rate per 10,000 Licensed Drivers										
		1996	1997	1998	1999*	2000	2001	2002	2003	Percent Change
Crash Drivers										
Female	Number	230,501	236,199	242,097	240,121	244,972	254,012	262,530	265,843	15.33
	Rate	865.8	871.7	866.2	832.9	834.1	815.6	786.4	753.1	-13.02
Male	Number	334,919	336,753	341,996	333,429	340,944	349,205	358,909	361,063	7.81
	Rate	1,266.6	1,268.3	1,254.6	1,188.8	1,194.0	1,154.1	1,109.2	1,060.1	-16.30
Injury Crash Drivers										
Female	Number	73,026	73,037	72,501	68,224	71,187	73,185	73,911	74,732	2.34
	Rate	274.3	269.5	259.4	236.6	242.4	235.0	221.4	211.7	-22.82
Male	Number	97,316	95,237	94,032	86,726	90,031	92,865	92,593	92,419	-5.03
	Rate	368.0	358.7	345.0	309.2	315.3	306.9	286.1	271.3	-26.27
Fatal Crash Drivers										
Female	Number	638	644	681	659	655	682	632	678	6.27
	Rate	2.40	2.38	2.44	2.29	2.23	2.19	1.89	1.92	-19.85
Male	Number	1,590	1,617	1,577	1,486	1,589	1,756	1,628	1,699	6.86
	Rate	6.01	6.09	5.79	5.30	5.56	5.80	5.03	4.99	-17.04

Data excludes bicyclists and pedestrians. The number of licensed drivers is used as a proxy measurement of risk exposure. We do not have a measure of actual miles driven by driver age or gender.

*Not all paper crash report documents could be recovered for 1999 so these figures are assumed to be lower than the actual count.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

For female drivers, only drivers ages 16-17 experienced a decline in the number of drivers in crashes from 1996 to 2003. For all other age groups the number of female drivers in crashes increased from 15.2 to 21.7 percent.

- ◆ The number of young male drivers ages 16-17 in crashes also declined and the decline was much greater than for female drivers ages 16-17. 4,027 fewer young male drivers ages 16-17 were in crashes in 2003 than in 1996.
- ◆ The number of female drivers ages 18-20 in crashes increased 21.7 percent from 1996 to 2003 compared with only a 5.7 percent increase in the number of male drivers ages 18-20 in crashes. 4,385 more female drivers ages 18-20 were in crashes in 2003 than in 1996. In comparison 1,645 more male drivers ages 18-20 were in crashes in 2003 than in 1996.
- ◆ The same pattern occurred for injury crashes compared with male drivers. From 1996 to 2003 the number of female drivers in injury crashes increased in all age groups except for female drivers ages 16-17.
- ◆ When adjusted for the increase in female or male drivers the crash rates declined in all age groups for both female and male drivers. But the decline was not as great for females overall as for male drivers.
- ◆ The number of female drivers ages 16-17 in fatal crashes increased 9.3 percent compared with a decline of 23.5 percent for male drivers in fatal crashes in the same age group.

**Drivers in Crashes by Gender and Age
Number and Rate per 10,000 Licensed Drivers**

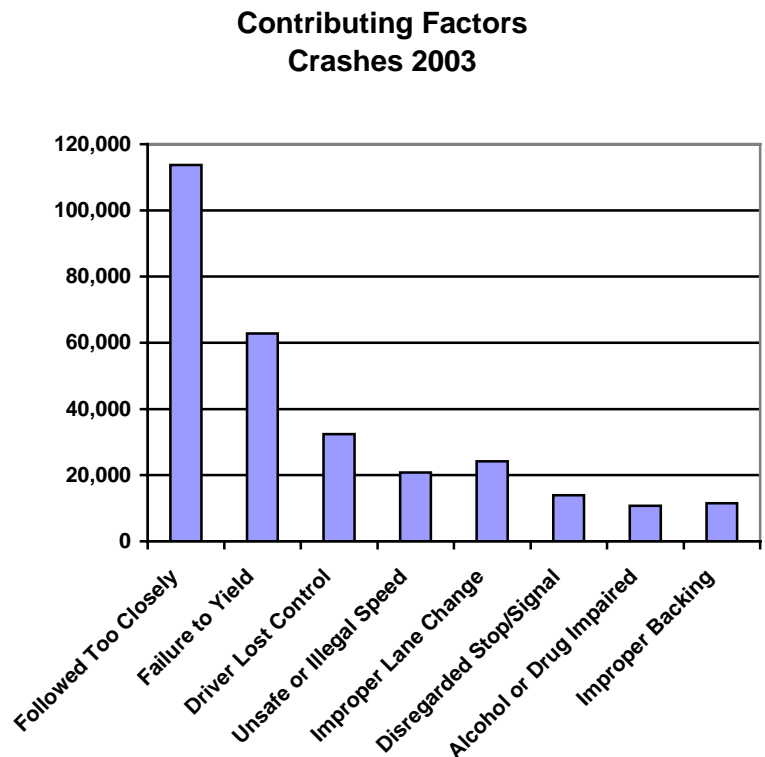
Female Crash Drivers							Male Crash Drivers						
Age	1996		2003		Percent Change Number	Percent Change Rate	Age	1996		2003		Percent Change Number	Percent Change Rate
	Number	Rate	Number	Rate				Number	Rate	Number	Rate		
16-17	13,841	19.18	12,818	15.24	-7.39	-20.56	16-17	19,127	24.32	15,100	17.16	-21.05	-29.44
18-20	20,214	16.02	24,599	15.22	21.69	-4.94	18-20	29,018	21.45	30,663	18.38	5.67	-14.34
21-24	26,696	13.59	30,751	11.44	15.19	-15.82	21-24	35,328	17.41	37,399	14.74	5.86	-15.37
>24	164,031	7.31	191,533	6.41	16.77	-12.25	>24	224,434	10.19	247,866	8.64	10.44	-15.17
Female Injury Crash Drivers							Male Injury Crash Drivers						
16-17	4,736	6.56	3,790	4.51	-19.97	-31.36	16-17	6,112	7.77	4,246	4.83	-30.53	-37.91
18-20	6,739	5.34	7,241	4.48	7.45	-16.07	18-20	9,217	6.81	8,503	5.10	-7.75	-25.21
21-24	8,582	4.37	8,739	3.25	1.83	-25.58	21-24	10,901	5.37	10,056	3.96	-7.75	-26.25
>24	51,737	2.30	53,889	1.80	4.16	-21.72	>24	66,032	3.00	64,880	2.26	-1.74	-24.53
Female Fatal Crash Drivers							Male Fatal Crash Drivers						
16-17	43	0.06	47	0.06	9.30	-6.24	16-17	85	0.11	65	0.07	-23.53	-31.66
18-20	60	0.05	65	0.04	8.33	-15.38	18-20	150	0.11	121	0.07	-19.33	-34.60
21-24	62	0.03	60	0.02	-3.23	-29.28	21-24	185	0.09	179	0.07	-3.24	-22.65
>24	457	0.02	491	0.02	7.44	-19.26	>24	1126	0.05	1,278	0.04	13.50	-12.82

Data excludes bicyclists and pedestrians. The number of licensed drivers is used as a proxy measurement of risk exposure. We do not have a measure of actual miles driven by driver age or gender.

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Although crashes are rarely caused by a single factor examining single contributing factors provides information on dangerous driver behaviors and errors that increase the risk of a crash occurring. The best way to prevent injuries and death is to prevent the crash from happening in the first place.

- ◆ Followed Too Closely was the most frequent contributing factor in crashes, it was noted by law enforcement officers 113,671 times in motor vehicle crashes in 2003.
- ◆ Failure to Yield was the second most often cited crash contributing factor, reported 62,760 times in 2003.
- ◆ In 2003, Driver Lost Control was noted 32,382 times and Unsafe or Illegal Speed was noted 20,776 times in crashes.



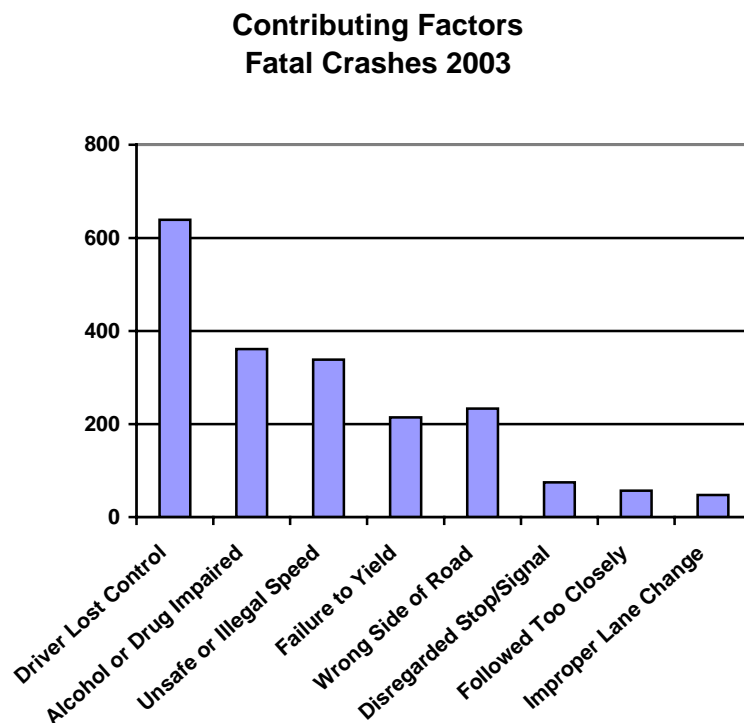
Crash Contributing Factors						
Number Reported and Rate per 10,000 Licensed Drivers						
	1996		2003		Percent	Percent
	Number	Rate	Number	Rate	Change in Number	Change in Rate
Followed Too Closely	86,829	163.62	113,671	163.88	30.91	0.16
Failure to Yield	66,596	125.50	62,760	90.48	-5.76	-27.90
Driver Lost Control	28,810	54.29	32,382	46.69	12.40	-14.01
Unsafe or Illegal Speed	22,034	41.52	20,776	29.95	-5.71	-27.86
Improper Lane Change	21,496	40.51	24,216	34.91	12.65	-13.81
Disregarded Stop/Signal	14,691	27.68	13,939	20.10	-5.12	-27.41
Alcohol or Drug Impaired	11,278	21.25	10,694	15.42	-5.18	-27.45
Improper Backing	11,132	20.98	11,520	16.61	3.49	-20.83

*Count of number of times the contributing factor was noted for drivers in a crash. More than one contributing factor may be noted for a driver. The contributing factors listed do not represent all possible factors. Data excludes bicyclists and pedestrians

Data Sources: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Contributing factors related to the driver provide information on dangerous driver behaviors that increase the risk of a fatal crash. Often it is not one single factor, but several that combine and result in a deadly crash. Yet each factor is critical because they are part of the chain of events that lead to a fatal crash.

- ◆ Driver Lost Control was the most frequently noted contributing factor in fatal crashes, reported 639 times for the 2,377 drivers in fatal crashes in 2003.
- ◆ Alcohol or Drug Impaired and Unsafe or Illegal Speed were the next highest contributing factors reported 361 and 338 times respectively.



Fatal Crash Contributing Factors Number Reported and Rate per 10,000 Licensed Drivers

	1996		2003		Percent	Percent
	Number	Rate	Number	Rate	Change in	Change in
					Number	Rate
Driver Lost Control	561	1.06	639	0.92	13.90	-12.85
Alcohol or Drug Impaired	503	0.95	361	0.52	-28.23	-45.09
Unsafe or Illegal Speed	402	0.76	338	0.49	-15.92	-35.67
Failure to Yield	238	0.45	214	0.31	-10.08	-31.21
Wrong Side of Road	209	0.39	233	0.34	11.48	-14.71
Disregarded Stop/Signal	79	0.15	75	0.11	-5.06	-27.37
Followed Too Closely	41	0.08	57	0.08	39.02	6.36
Improper Lane Change	40	0.08	47	0.07	17.50	-10.10

*Count of number of times the contributing factor was noted for drivers in a fatal crash. More than one contributing factor may be noted for a driver. The contributing factors listed do not represent all possible factors. Twenty-eight drivers in fatal crashes were reported as being distracted. Twenty-eight drivers in fatal crashes were reported as 'Apparently Fell Asleep' under Driver Condition. Data excludes bicyclists and pedestrians

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Unsafe or illegal speed is involved in at least one out of five fatal crashes in Georgia. Speeding may never be recorded on the crash report if there is no physical evidence such as skid marks however speed is closely associated with crashes involving loss of control of the vehicle, following too closely or failure to yield. Speed decreases the time available to make split second decisions, increases the difficulty in maneuvering the vehicle, reduces the time and ability to safely stop, and contributes significantly to the severity of impact.



Speed-Related Fatal Crash Involving a Mitsubishi Eclipse
Source: <http://need4speed.ws>

- ◆ Young drivers are involved in speed related crashes far more often than older drivers. Unsafe or Illegal Speed was noted for 34.8 percent of the drivers ages 16-17 in fatal crashes, compared with 11.4 percent of drivers over age 24 in fatal crashes.
- ◆ Risk taking such as speeding or riding a roller-coaster are thought to increase dopamine levels in the pleasure centers of the brain and that induces a feeling of well-being – it feels good. Further research suggests that this can be addictive and cause the person to take one more ride or push the pedal down more. Although this affects persons of all ages the younger person may be more affected. This combined with the lack of frontal lobe development that impairs their judgement may contribute to the higher number of speed related crashes, injuries and fatalities of the teenage driver.
- ◆ The number of illegal or unsafe speed-related fatal crashes has not demonstrated a clear downward trend over the last eight year and varied from a high of 404 in 1996 to a low of 304 in 1999. The number of drivers in speed-related injury crashes has remained essentially the same from 2000 to 2003.

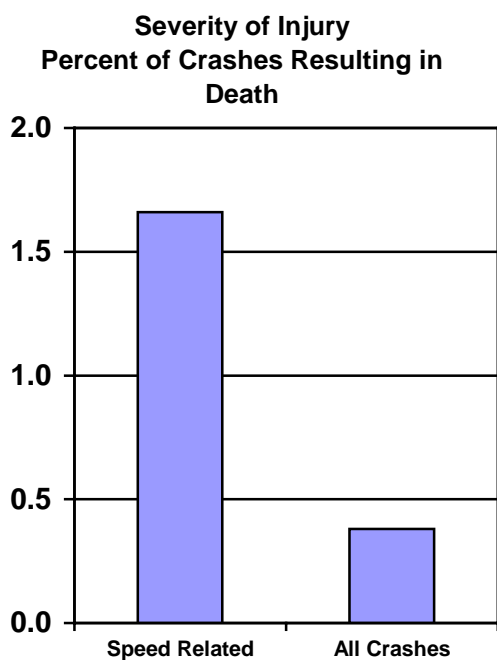
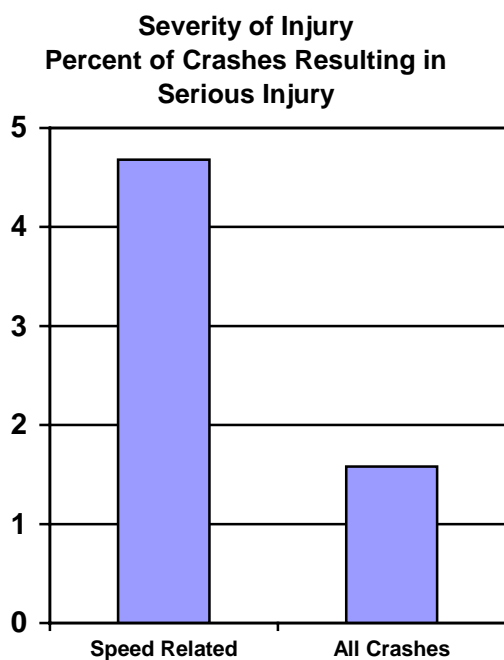
Drivers in Unsafe or Illegal Speed Related Crashes Number and Rate per 10,000 Licensed Drivers									
	1996	1997	1998	1999*	2000	2001	2002	2003	Percent Change 1996-2003
Drivers	22,034	22,044	20,224	17,867	20,262	20,128	21,202	20,776	-5.71
Rate	41.5	41.1	36.6	31.4	35.0	32.8	32.2	30.0	-27.71
Injury Drivers	9,946	9,699	8,761	7,633	8,529	8,612	8,934	8,617	-13.36
Rate	18.7	18.1	15.9	13.4	14.7	14.0	13.6	12.4	-33.69
Fatal Drivers	402	393	342	304	319	340	309	338	-15.92
Rate	0.76	0.73	0.62	0.53	0.55	0.55	0.47	0.49	-35.53
* Number of times drivers were noted with the contributing factors of unsafe or illegal speed. Data excludes bicyclists and pedestrians									

*Not all paper crash report documents could be recovered for 1999 so these figures are assumed to be lower than the actual count.
Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Unsafe or illegal speed increases not only the risk of a crash but the chance that someone will be injured or killed when a crash occurs.

- ◆ The chance of a crash being fatal is over four times higher in crashes related to speed than crashes not related to speed. From 1996 through 2003 the percent of all crashes resulting in death was only 0.4 percent compared with 1.7 percent for speed-related crashes.
- ◆ Small increases in speed can increase the severity of injury while small reductions in speed can be effective in preventing deaths and reducing injuries. Regions that have introduced speed cameras have seen reductions in fatalities and serious injuries on their roads.
- ◆ Following the installation of speed photo radar cameras in France crashes declined 32 percent. Use of speed photo radar cameras in England resulted in a 35 percent reduction in fatalities and serious injuries at camera sites.
- ◆ The chance of being seriously injured is almost three times higher in crashes related to speed than crashes not related to speed. In 2003 the percent of all crashes resulting in serious injury was only 1.6 percent compared with 4.7 percent for speed-related crashes.

Injury severity follows simple physics, severity of injury equals severity of impact (mass x speed = force of impact). When a vehicle traveling at 70-mph strikes a fixed object or another vehicle the car stops suddenly. If unrestrained by a safety belt the occupants continue to move forward as fast as the vehicle was going until they strike the windshield or another part of the vehicle or are ejected as in many cases to be rolled over by their own vehicle.



Data excludes bicyclists and pedestrians

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

Although it has been known for decades that alcohol, drugs and driving do not mix, impaired driving crashes still continue to be one of the major threats to the safety of all who use Georgia's roadways.

- ◆ On average, impaired drivers were involved in 29 motor vehicle crashes a day in 2003.
- ◆ Male drivers were over-represented in fatal crashes overall. In 2003 male drivers accounted for 82.3 percent of the alcohol or drug involved drivers in fatal crashes.
- ◆ From 1996 to 2003 there were 84,113 alcohol or drug impaired drivers in crashes, 43,108 drivers in alcohol or drug injury crashes and 2,907 impaired drivers in fatal crashes.
- ◆ The number of drivers in all alcohol or drug related crashes have not demonstrated a clear downward trend in the last eight years.
- ◆ In fatal alcohol or drug related crashes the number of drivers varied from a high of 516 in 1997 to a low of 308 in 2000 (excluding 1999).
- ◆ The number of drivers in fatal alcohol or drug related crashes declined from 1996 to 1998 although the number of impaired drivers in fatal crashes has remained essentially the same from 2000 to 2003. The number of impaired drivers in injury crashes also did not decline from 2000 to 2003.

On average a 170-pound man reaches .08 percent BAC after consuming five 12-ounce beers (4.5 percent alcohol by volume) over a 2- hour period according to the National Highway Transportation Administration. A 120-pound woman reaches the same level after consuming three beers over the same period. Recent research suggests that alcohol blood levels as low as .02 may impair driving skills and the degree of impairment increases with increased blood alcohol levels.

**Drivers in Alcohol or Drug Related Crashes*
Number and Rate per 10,000 Licensed Drivers***

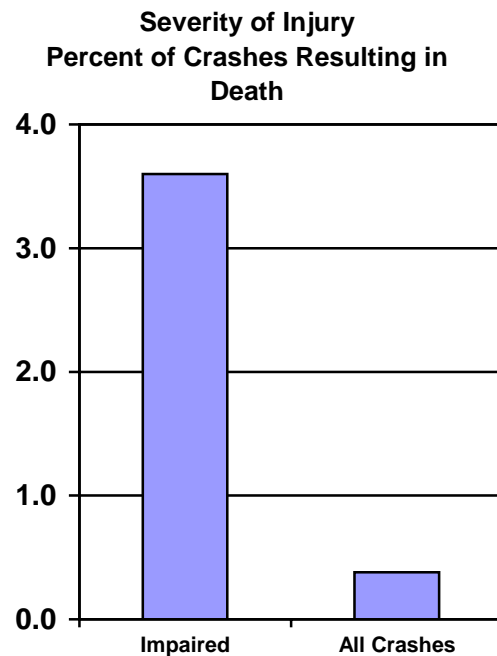
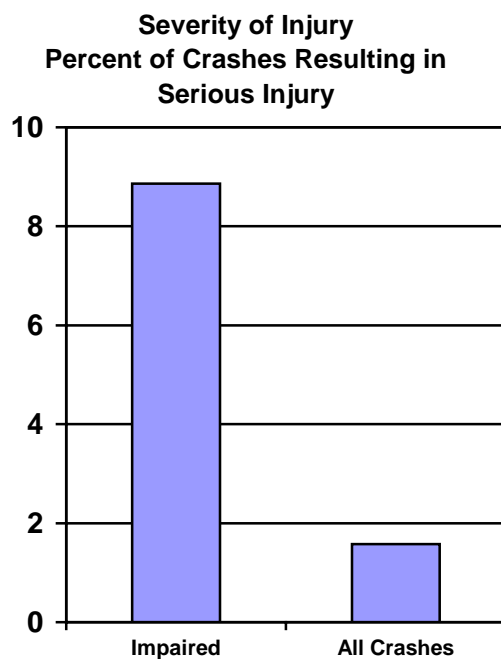
	1996	1997	1998	1999**	2000	2001	2002	2003	Percent Change 1996-2003
Drivers	11,278	10,675	9,915	9,224	10,112	10,978	11,237	10,694	-5.18
Rate	21.3	19.9	18.0	16.2	17.5	17.9	17.1	15.4	-27.44
Injury Drivers	6,199	5,605	5,143	4,607	5,147	5,565	5,516	5,326	-14.08
Rate	11.7	10.4	9.3	8.1	8.9	9.1	8.4	7.7	-34.26
Fatal Drivers	503	516	362	226	308	351	280	361	-28.23
Rate	0.95	0.96	0.66	0.40	0.53	0.57	0.43	0.52	-45.26

* Number of drivers noted with driver condition of alcohol, drugs or alcohol and drugs. Data excludes pedestrians and bicyclists.

**Not all paper crash report documents could be recovered for 1999 so these figures are assumed to be lower than the actual count.
Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004

The likelihood of being killed in a motor vehicle crash is much greater if the driver is impaired. Although alcohol or drug related crashes were only 3.2 percent of the total crashes impaired driving accounted for 24 percent of the crash fatalities in 2003.

- ◆ The overwhelming majority of drivers in alcohol or drug related fatal crashes were drivers age 21 or older. In 2003 of the alcohol or drug impaired drivers 89.7 percent were age 21 or over.
- ◆ Driving Under the Influence of Alcohol or Drugs was noted for 8.0 percent of the drivers ages 16-17 in fatal crashes, compared with 23.9 percent of drivers ages 21-24 in fatal crashes and 15 percent of the drivers over age 24.
- ◆ The chance of a crash being fatal was almost seven times higher in alcohol or drug related crashes than crashes not related to impaired driving. In 2003 the percent of all crashes resulting in death was only 0.4 percent compared with 3.4 percent for alcohol or drug related crashes.
- ◆ The chance of being seriously injured is five times higher in alcohol or drug related crashes than crashes not involving alcohol or drugs. In 2003 the percent of all crashes resulting in serious injury was only 1.6 percent compared with 8.86 percent for impaired driving crashes.



Data excludes bicyclists and pedestrians

Data Source: Georgia Department of Motor Vehicle Safety, data revised and released as of September 2004